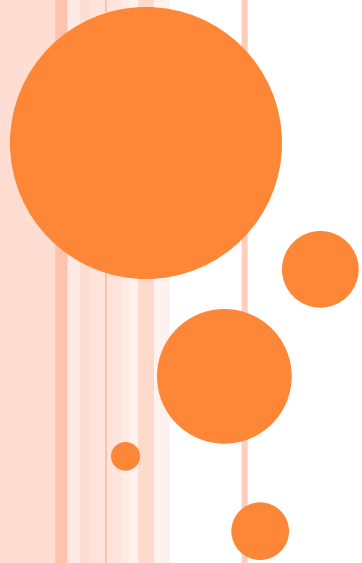


Eggs



TERMS

- Young Female= Chick or Pullet
- Mature Female= Hen
- Young Intact Male= Chick or Cockeral
- Mature Intact Male= Rooster
- Young Castrated Male= Capon
- Newborns= chicks
- Meat chicken= broiler



SECTORS OF THE INDUSTRY

- Egg Production
- Broiler Production
- Raising Replacement Pullets



EGG PRODUCTION

- Laying Hens
- Confined in **cages or floor pen system**
- Cleaning, grading, and packaging eggs occurs on farm
- What happens to hens when production cycle is complete?







EGG PRODUCTION

- Floor system- gather **3** times a day
- Caged system- **automatic** egg gatherer
- Keep hens up to 5 yrs.
 - Best production in first 2 years
- **Increase** light duration and intensity for onset of egg laying



CARE AND HANDLING OF EGGS

- Wash eggs
 - **Must be clean!**
 - Dry Cleaning vs. Egg Washing Machine
- Maintain quality by
 - **Keep cool**
 - **Keep humid**
 - **65 Degrees F**
 - **Store separately**
 - They absorb odors!



EGG PRODUCTION – DON'T NEED TO COPY

- Do you need a rooster for a hen to lay eggs?
 - **Nope!!!** Chicks are fertilized eggs
- **How are eggs fertilized?**
 - Internally before they are laid
 - Takes 7-10 days for sperm to travel to ovary
 - Lay fertile eggs for about 6-10 days



EGG PRODUCTION – DON'T NEED TO COPY

- How many eggs does the average American consume per year????
 - 256 eggs/year
- 1945 average of 403 eggs/year...Why?
 - Cholesterol
 - Eating Habits-Breakfast anyone????
 - Convenience Food



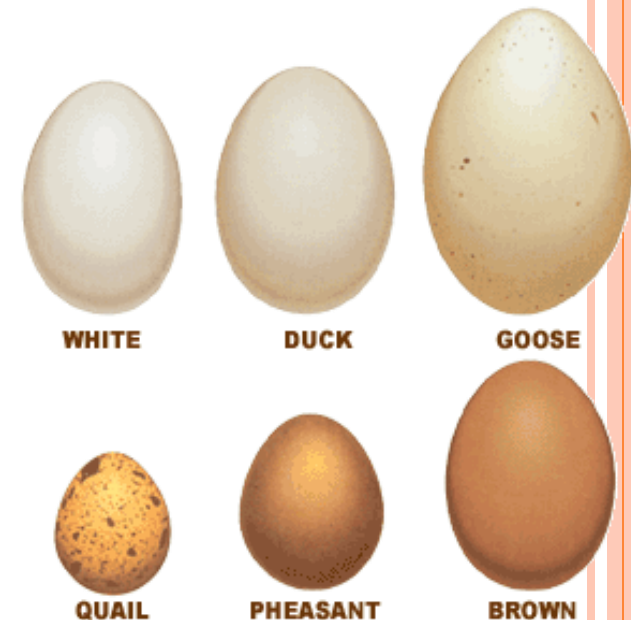
NUTRITION VALUE

- Two Eggs Supply
 - 7% of Calories (**75 calories** per egg)
 - 28% Protein
 - 22% Phosphorus
 - 10% Iron
 - **39% Riboflavin**
 - **50% Vitamin B12**
 - 79% Vitamin A
 - **213 mg of Cholesterol**



SELECTION FACTORS

- Intended use
- Exact name
 - Chicken eggs
 - Fresh shell eggs vs. storage eggs
- Product size: peewee—jumbo
- Govt. grades
 - Checks for wholesomeness
 - Grades: AA, A, B (high, med, low)
 - <http://www.youtube.com/watch?v=BjDQ8QXB7cg>



DIFFERENT TYPES OF EGGS

Comparison of egg sizes



1. **Chukar**
2. **Pheasant**
3. **Chicken – pullet**
4. **Chicken – pullet**
5. **Chicken – jumbo**
6. **Chicken – jumbo**
7. **Duck**
8. **Duck**
9. **Turkey**
10. **Goose**
11. **Emu**
12. **Ostrich**



TYPES OF DOZEN PACKAGING



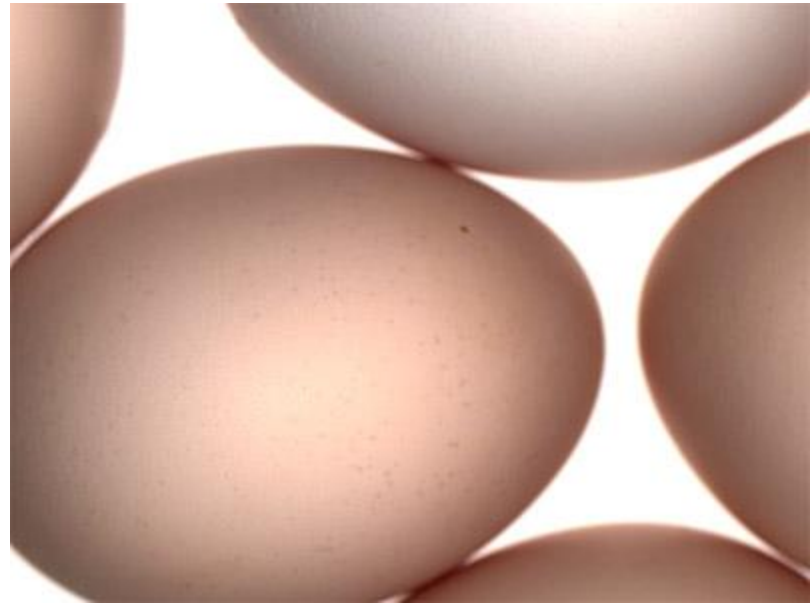
Taiwan Egg Carton
www.eatingchina.com / Copyright © 2005 Stephen Jack



COMMON EGG PRODUCTION SYSTEMS

○ It is your choice to select egg produced in the following ways:

1. **Conventional**
2. **Cage Free**
3. **Free Range**
4. **Organic**



But what do they all mean?



CONVENTIONAL

- The birds are more readily protected from the elements, disease and predators (including each other, via the proverbial “pecking order”)
- Hens typically have fewer diseases and require less medication, only receiving them for therapeutic reasons
- Research shows eggs have lower shell bacteria levels than eggs from specialty systems
- far the most cost-effective for you, prices around \$1.50 per dozen (specialty systems can drive prices as high as \$3.00 per dozen or more.)



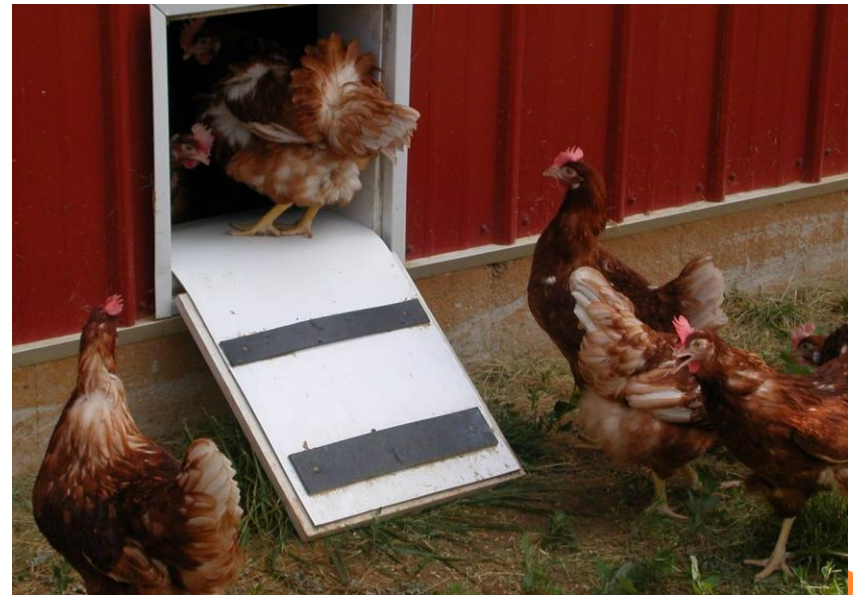
FREE-RANGE EGGS

- Free-Range eggs are produced by hens raised outdoors, or that at least have access to the outdoors depending on weather.
- In addition to their intended diet of grains, free-range hens may forage for wild plants and insects, which can result in a very small increase in egg protein content.
- Due to higher production costs and lower volume of birds per farm, generally more expensive than those from conventional systems.



CAGE-FREE EGGS

- Cage-Free eggs are laid by hens living in indoor floor operations, sometimes called free-roaming hens.
- The hens may roam in a building, room or open area, usually in a barn or poultry house. In addition to providing unlimited access to fresh food and water, nest space, perches and litter, egg farmers strive to assure hen health, safety and comfort.
- Research has indicated that hens kept in cage-free or free-range systems have higher rates of mortality than those kept in conventional production systems. Cost per dozen eggs is higher, too, due to increased production costs.



BATTERY CAGES

- The vast majority of egg-laying hens in the United States are confined in battery cages.
- On average, each caged laying hen is afforded only 67 square inches of cage space—less space than a single sheet of letter-sized paper on which to live her entire life.
- Unable even to spread their wings, caged laying hens are among the most intensively confined animals in agribusiness.



ORGANIC EGGS

- Organic eggs are produced by hens whose feed is made from ingredients grown without most conventional pesticides, fungicides, herbicides or commercial fertilizers. This system conforms to national USDA organic standards related to methods, practices and substances used in producing and handling crops, livestock and processed agricultural products.
- As with other specialty eggs, organic eggs cost more than eggs from conventional systems, without providing any additional nutrient content.

